

# **3rd LCLUC Science Team Meeting**

**Airlie House, Warrenton, Va**

**May 18-21 1999**

**May 18<sup>th</sup> Day 1, 9.00 am**

**Plenary Session - The Jefferson Room**

Welcome and Objectives of the Meeting – C. Justice / J. Ranson

Programmatic - LCLUC the first years: a programmatic retrospective – A. Janetos

Programmatic - Current Status of the LCLUC program – C. Justice

**Concurrent Session 1A – The Jefferson Room**

10 – 10.45 Early Results - The dynamics of a semi-arid region in response to climate and water use policy – J. Mustard

10.45- 11.30 Early Results – Assessing future stability of US High Plains landcover integration of process modeling with Landsat, in-situ, modern and paleoclimate data - J. Overpeck

11.30 – 12.30 Identifying the significant results, new and improved methods, emerging theories and policy implications from the case studies: discussion. Co Chairs: A. Janetos / D. Brown

**Concurrent Session 1B – The Audubon Room (located in auxiliary building)**

10 – 10.45 Early Results - Land Cover Change in the Great Plains: predicting impacts of regional forest expansion on biogeochemical processes – L. Johnson

10.45- 11.30 Early Results – Quantifying Grassland to Woodland Transitions and the implications for carbon and nitrogen dynamics in the Southwest United States – S. Archer

11.30 – 12.30 Identifying the significant results, new and improved methods, emerging theories and policy implications from the case studies: discussion. Co Chairs: P. Matson / T. Fisher

**LUNCH 12.30 – 1.30 The Airlie Room**

**May 18<sup>th</sup> Day 1, 1.30pm**

**Plenary Session - The Jefferson Room**

1.30 – 1.50 pm Programmatic - Land use change and policy implications – A. Janetos

1.50 – 2.10 pm Programmatic – The IPCC Report Structure and the Land Cover Chapter – R. Houghton

2.10 – 2.30 pm Programmatic – The USGCRP Carbon Cycle Initiative and Land Use Change – L. Dilling  
/E.Spiker

**Concurrent Session 2A – The Jefferson Room**

2.30 – 3.15 Early Results – Modeling carbon dynamics and their economic implications in two forest regions: pacific northwestern USA and northwestern Russia – J. Kerkvliet

3.15 – 4.00 Early Results – Effects of the development of the Baikal Amur mainline railroad on patterns of boreal forest cover and carbon fluxes in southern Siberia – E. Kasischke

**4.00 – 4.45 Early Results – The role of land-cover change in high latitude ecosystems: implications for the global carbon cycle – D. McGuire - MOVE to Thursday am - Concurrent Session 5B-10.45am**

**4.00 – 5.30** Identifying the significant results, new and improved methods, emerging theories and policy implications from the case studies: discussion. Co Chairs: R. Houghton / D. Kicklighter

**Concurrent Session 2B – The Audubon Room**

2.30 – 3.15 Early Results – Modeling and forecasting effects of land use change in China based on socioeconomic drivers – R. Kaufmann

3.15 – 4.00 Early Results – Time series forest change, land cover/land use conversion and socio-economic driving forces in the Northern Peten District, Guatemala – D. Hayes

4.00 – 5.30 Identifying the significant results, new and improved methods, emerging theories and policy implications from the case studies: discussion. Co Chairs: R. DeFries / S. Archer

**DINNER 6.30pm – The Airlie Room**

**7.30 – 8.15 After Dinner Speaker (The Jefferson Room) – NSF and Land Cover and Land Use Change: status and future directions - Tom Baerwald**

## **Day 2. May 19, 9.00 am**

### **Plenary Session – The Jefferson Room**

9.00 – 9.20 Meeting Report - Integrating social, ecological and remote sensing information on secondary growth – R. Walker

9.20 – 9.40 Meeting Report – Amazon LCLUC Pattern to Process – C. Wood

9.40 – 10.00 Programmatic – New developments in the IGBP/IHDP LUCC program – E. Moran

10.00 - 10.10 Programmatic - Upcoming Amazon LCLU meeting announcement - Foster Brown

### **Concurrent Session 3A - The Jefferson Room**

10.00 - 10.45 Early Results – Land cover and land use change in southern Yucatan Peninsular Region – B. Turner

10.45 – 11.30 Land Use and Land Cover Change in Sonora, Mexico: trajectories of agricultural intensification and consequences for non-agricultural systems – P. Matson

11.30 – 12.30 Identifying the significant results, new and improved methods, emerging theories and policy implications from the case studies: discussion. Co Chairs: R. Walker / T. Stone

### **Concurrent Session 3B – The Studio**

10.00 – 10.45 Early Results – Deforestation and degradation in Southern and Central Africa Savannas – S. Prince

10.45 – 11.30 Early Results – Coupling land use and land cover change and ecosystem processes in Miombo Woodlands – P. Desanker

11.30 – 12.30 Identifying the significant results, new and improved methods, emerging theories and policy implications from the case studies: discussion. Co Chairs: R. Rindfuss / L. Johnson

**LUNCH 12.30 – 1.30 The Airlie Room**

## **Day 2. May 19, 2.00pm**

### **Plenary Session – The Jefferson Room 2.00 – 3.00pm**

Meeting Report – Fire Management in African Savannas – P. Frost

Research Presentation – Deforestation Dynamics on the Bolivian Frontier – S. Hecht

### **Concurrent Session 4A – The Jefferson Room**

3.00 – 3.45 Early Results – The Process of Land Cover and Land Use Change in Central Africa – D. Wilkie

3.45 – 4.30 Early Results – Study of land use and deforestation in Central African Tropical Forests using high resolution SAR satellite imagery – S. Saatchi

4.30 – 5.30 Identifying the significant results, new and improved methods, emerging theories and policy implications from the case studies: discussion. Co Chairs: R. Bilsborrow / C. Dobson

### **Concurrent Session 4B – The Studio**

3.00– 3.45 Early Results – Case studies and diagnostic models of the interannual dynamics of deforestation in Southeast Asia – D. Skole

3.45 – 4.30 Early Results – Soils, water, people and pixels: a study of Nang Rong – R. Rindfuss

4.30 – 5.30 Identifying the significant results, new and improved methods, emerging theories and policy implications from the case studies: discussion. Co Chairs: R. Kaufmann / C. Wood

**DINNER 6.30pm – The Airlie Room**

**7.30pm After Dinner Presentation - OSTP**

## **Day 3, May 20<sup>th</sup>**

### **Plenary Session – The Jefferson Room**

9.00 – 9.30 Programmatic – The GOFC Project and the role of LCLUC – J. Townshend

9.30 – 10.00 Programmatic – An assessment of the availability and utility of microwave data for the study of land use and land cover change: a review – G. Sun

### **Concurrent Session 5A – The Jefferson Room**

10.00 – 10.45 Early Results – Hierarchical investigation of socioeconomic drivers of decadal scale land cover changes in the upper Midwest – D. Brown.

10.45 – 11.15 Early Results – Causes and Consequences of land cover in a Greater Ecosystem: trend assessment, monitoring and outreach – A. Hansen

11.15 – 12.00 Identifying the significant results, new and improved methods, emerging theories and policy implications from the case studies: discussion. Co Chairs: S. Prince / J. Kerkvliet

### **Concurrent Session 5B – The Studio**

10.00 – 10.45 - Early Results - Characterizing land cover heterogeneity and land cover change from multi-sensor satellite data – R. DeFries

10.45 – 11.15 - Early Results – The role of land-cover change in high latitude ecosystems: implications for the global carbon cycle – D. McGuire

11.15 – 12.00 Identifying the significant results, new and improved methods, emerging theories and policy implications from the case studies: discussion. Co Chairs: C. Woodcock /P. Desanker

**LUNCH 12.00 - 1.00 – The Airlie Room**

## **Plenary Session – The Jefferson Room**

1.00 – 1.30 Programmatic – The direction of NASA ESE and the role of LCLUC - J. Kaye

1.30 – 2.00 Research Presentation – Climate sensitivity of the Middle East landscape - R. Smith

2.00 - 2.15 Packaging early results for the NASA LCLUC program – C. Justice

**2.15 – 4.00 Co Chairs summary reporting of the significant results, new and improved methods, emerging theories and policy implications from the case studies from the concurrent sessions – Presentation and Discussion**

### **Concurrent Session 4.00 - 5.30**

**5A Synthesis Group** (The Jefferson Room) - developing a synthesis of program findings - Co Chairs – B. Turner / D. Skole

**5B Packaging Group** (The Studio) –packaging of program results – Co Chairs – J. Ranson / S. Archer

DINNER 6.30 – The Airlie Room

7.30 – 8.15 Possible after dinner speaker (The Jefferson Room) -

## **Day 4, May 21<sup>st</sup>**

### **Plenary Presentation 9.00 – 12.00 – The Jefferson Room**

9.00 – 9.30 Programmatic - The Landsat 7 Program: status report – J. Irons

9.30 – 10.00 Programmatic - Future Satellite Missions Relevant for LCLUC – J. Ranson

10.00 – 10.20 Synthesis of Findings – group report back - Skole / Turner

### **COFEE BREAK**

10.30 – 10.40 Packaging the Results – group report back - Ranson / Archer

10.40 – 11.40 Programmatic - Future science directions and priority focus areas for the NASA LCLUC program: towards the next LCLUC NRA: ideas and open discussion – Chris Justice / Jon Ranson

11.40 – 12.00 Programmatic – Next steps for the LCLUC Program and Action Items from the meeting – Chris Justice

### **12.00 Close of Meeting, Lunch and DEPARTURE**